

AMENDMENTS TO THE SPECIFICATION

Page 2, replace the paragraph beginning at line 7 with the following amended paragraph:

According to the present invention, the above-mentioned object is accomplished by a vehicle from body structure, comprising: a ~~pare~~ pair of longitudinal structural members; a front compartment formed inside the longitudinal structural members; a power unit connected to the longitudinal structural members and placed in the front compartment; and an impact load transfer mechanism formed outside the front compartment and changes the impact load direction to a lateral direction for transmitting the impact load to the longitudinal structural member and the power unit directly.

Page 5, replace the paragraph beginning at line 8 with the following amended paragraph:

According to the embodiment of the invention, as shown in Fig. 9, the front body structure includes an impact load transfer mechanism B that, when a collision input F ~~directing to rearward~~ directed rearwardly of the vehicle 10 is applied on the lateral side of a vehicle front end, converts the collision input F to lateral forces F_{y1} , F_{y2} ~~directing to inwardly~~ directed inwardly in the width direction of the vehicle 10 and further transmits the forces F_{y1} , F_{y2} to the power unit P and a skeletal member installed in the front compartment FC directly. In detail, the impact load transfer mechanism B is formed by a side-member front area 11F of the side member 11 and a sub-side member 20 both described later.

Page 5, replace the paragraph beginning at line 18 with the following amended paragraph:

That is, as shown in Fig. 4, the side-member front area 11F in front of the reinforcing part A of the side member 11 is inclined outwardly in the width direction (inclination angle: θ) as directing ahead of the vehicle 10. As shown in Fig. 5, the "out-directing" front area 11F is provided with a strength control mechanism C that establishes a relationship in strength that a maximum stress generated at each front of ~~e-imaginary~~ imaginary sections Ia, Ib, Ic..., Ie succeeding in the longitudinal direction of the area 11F is more than or close to a maximum stress generated at each rear of the same sections Ia, Ib, Ic..., Ie. (Front \geq Rear).

Page 6, replace the paragraph beginning at line 1 with the following amended paragraph:

Further, as shown in Figs. 3 and 4, each of the sub-side members 20 is arranged so as to extend from the vicinity of a continuous base 11Fb of the front area 11F to the front of the vehicle 10, substantially straight to an extension of a side-member rear area 11R. The front ends of the sub-side members 20 are connected to the rear face of the bumper reinforcement 12. Each sub-side member 20 is provided with a deformation mode control mechanism D that allows the sub-side member 20 to be bent inwardly in the width direction by the collision input F, thereby causing the member's interference with the power unit 20 P.

Page 9, replace the paragraph beginning at line 7 with the following amended paragraph:

The power unit P is supported by the mount brackets 19 each provided in the reinforcing part A of the side member 11. Additionally, as shown in Fig. 4, the power unit P is supported by a pair of attachment members 23 each extending from the bottom of the curved part E perpendicularly and a sub-frame 30 connected with the left and right extension side members 15 at four positions two positions and with the attachment members 23 at two positions.

Page 9, replace the paragraph beginning at line 21 with the following amended paragraph:

According to the front body structure of this embodiment, owing to the provision of the impact load transfer mechanisms B, when a collision input ~~directing to rearward~~ directed rearwardly of a vehicle is applied on the lateral side of a vehicle front end (e.g. an input F at a "small-overlap" collision causing an input face to concentrate in the lateral side of the vehicle – see Fig. 9), it is possible to convert the collision input F to lateral force F_{y1} , F_{y2} ~~directing to~~ directed inwardly in the width direction of the vehicle and also possible to directly ~~transmits~~ transmit the lateral forces F_{y1} , F_{y2} to various skeletal members in the front compartment FC, for example, the power unit P, the side members 11, the extension side members 15, etc. Therefore, as shown in Fig. 10, it is possible to induce and promote a lateral displacement of a vehicle rigid body.

Page 10, replace the paragraph beginning at line 15 with the following amended paragraph:

Repeatedly, the impact load transfer mechanisms B each comprises the side-member front area $F-11F$ inclined outwardly and the sub-side member 20 adapted to be positively deformable at a vehicle collision. With the constitution, the impact load transfer ~~mechanisms~~ mechanism B is capable of receiving an input F of a "small-overlap" collision shown in Fig. 9 through the front end of the "out-opened" side-member front area $11F$ directly.

Page 11, replace the paragraph beginning at line 7 with the following amended paragraph:

Further, owing to the forward-and-outward inclination of the side-member front area 11F, it is possible to transmit an input F from the front backward in the form of an oblique force ~~directing to inside and rearward~~ directed inwardly and rearwardly of the vehicle at a "small-overlap" collision, allowing a lateral force Fy1 to act on the skeletal members in the rear and the sub-frame 30.

Page 13, replace the paragraph beginning at line 2 with the following amended paragraph:

Accordingly, it is possible to convert an input F at a small-overlap collision to a force to depress the power unit P backward obliquely, thereby generating a lateral force Fy2 ~~directing to inside~~ directed inwardly in the width direction from part of the input in the fore-and-aft direction of the vehicle. As a result, together with a lateral force Fy1 by the side member 11, it is possible to apply lateral forces Fy1, Fy2 on the rigid skeletal members (e.g. the side member 11, the sub-frame 30, etc.) and rigid components of the power unit P at the small-overlap collision.

Page 14, replace the paragraph beginning at line 3 with the following amended paragraph:

Further noted that the side-member front area 11F is separated from the front end of the curved part E by a plane perpendicular to the longitudinal direction. As for this separation, the front area 11F is detachably joined to the curved part E through the plural bolts B3. Further, the rear end of the sub-side member 20 is also detachably connected with the curved part E through two bolts B1, B2. Therefore, it is possible to provide the portion of the side member 11 in front of the curved part E in the form of "front-end" module structure, it is possible to improve the

repairing capability ~~against a light collision (at low speed) that would fall a short of~~
damage at a light collision (at a low speed) that causes a light damage on the skeletal members,
in addition to the improvement in productivity.

Page 14, replace the paragraph beginning at line 14 with the following amended paragraph:

In these bolts B1, B2, furthermore, since the first bolt B1 penetrates the rear portion of the curved part E up and down, in the vicinity of its inside face E1 in the width direction of the vehicle and the second bolt B2 penetrates the front portion of the curved part E up and down, in the vicinity of its outside face E2 in the width direction of the vehicle, when the input F causes the sub-side member 20 to be bent from the first notches 21 and the second notches 22, there is generated, about the first bolt B1 as the center axis, a moment M to jerk the second bolt ~~2~~ B2 inwardly of the vehicle, as shown in Fig. 9.

Page 16, replace the paragraph beginning at line 7 with the following amended paragraph:

Owing to the provision of the impact load transfer mechanism that directly transmits an oblique force ~~directing to~~ directed inwardly and rearwardly of a vehicle to a power unit and skeletal members in a front compartment when a collision input ~~directing~~ directed rearwardly of the vehicle is applied on the lateral side of the vehicle front end, it is possible to induce and promote a lateral displacement of the vehicle rigid body at a "small-overlap" collision causing an input face to concentrate in the lateral side of the vehicle. Consequently, the vehicle body is capable of forward movement while departing from a collision object sideways, thereby reducing

the deformation of the vehicle body at the small-overlap collision effectively. In brief, by inducing and promoting the lateral displacement of a vehicle rigid body by making use of the input of the small-overlap collision in the fore-and-aft direction of the vehicle, it is possible to induce and promote a lateral displacement of the vehicle rigid body and also possible to reduce the deformation amount of the vehicle body.

Page 17, replace the paragraph beginning at line 1 with the following amended paragraph:

Owing to the provision of the strength control mechanism for each side member, which establishes a relationship such that the maximum stress at the front part of each of the imaginary sections succeeding in the longitudinal direction of the side member becomes more than or nearly equal to (front \geq rear) the maximum stress at the rear part of the same imaginary section, when the front end of the side member is subjected, at a small-overlap collision, to a collision input in parallel with the fore-and-aft direction of the vehicle, the side member allows a deformation to be induced from the front end and the deformation to be continuously transmitted backward without being folded at the base part of the side member. As a result, it is possible to absorb a collision energy effectively. Further, at the small-overlap collision, owing to the forward-and-outward inclination of the side-member, it is possible to transmit an input from the front backward in the form of an oblique force ~~directing to inside and rearward~~ directed inwardly and rearwardly of the vehicle and also possible to make a lateral force act on an engine mount and skeletal members in the rear. Noted that since the rear end of a side-member portion establishing the strength control mechanism is formed by the reinforcing part for mounting an engine, the utilization of features inherent in the reinforcing part allows the reinforcement for the

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side member to be alleviated, thereby progressing both rationalization and weight-saving of the front body structure.